

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (Currently Amended): A method of leaching a metal value from a heap of a metal-containing ore, which method includes the step of:
supplying a leach liquor onto a top surface of a section of a heap length and allowing the leach liquor containing metal values in solution to drain from a lower part of the section, with the leach liquor being supplied for a relatively short time period of less than 4 hours in each 24 hour period of carrying out the method and at a flow rate that is sufficient so that the downwardly flowing leach liquor saturates the section of the heap while the leach liquor flows through the section of the heap.

Claim 2 (Previously Presented): The method defined in claim 1 which further includes supplying the leach liquor at a flow rate that establishes and maintains the plug flow of the leach liquor and maintains saturation of the section of the heap while the leach liquor flows through the section of the heap.

Claim 3 (Previously Presented): The method defined in claim 2 which further includes supplying the leach liquor as a downwardly flowing curtain that contacts the top surface of the heap as a line or a narrow band that extends across the top surface and moving the curtain along the length of the section of the heap or the entire length of the heap continuously or in a series of steps.

Claim 4 (Original): The method defined in claim 3 wherein the curtain is continuous across the top surface of the heap.

Claim 5 (Previously Presented): The method defined in claim 1 further including supplying the leach liquor at a flow rate that is greater than 15 l/hr/m^2 of the top surface of the section.

Claim 6 (Original): The method defined in claim 5 wherein the flow rate is greater than 20 l/hr/m^2 of the top surface of the section.

Claim 7 (Previously Presented): The method defined in claim 6 wherein the flow rate is greater than 25 l/hr/m^2 of the top surface of the section.

Claims 8-9 (Cancelled).

Claim 10 (Previously Presented): The method defined in claim 1 wherein the time period is less than 3 hours per 24 hour period.

Claim 11 (Previously Presented): The method defined in claim 1 wherein the time period is less than 2 hours per 24 hour period.

Claim 12 (Previously Presented): The method defined in claim 1 further including supplying the leach liquor via a distributor that can be moved over the surface of the heap.

Claim 13 (Previously Presented): The method defined in claim 1 further including retaining and minimising run-off of the leach liquor supplied onto the top surface by positioning a barrier on the top surface of the heap.

Claim 14 (Previously Presented): The method defined in claim 1 further including retaining and minimising run-off of the leach liquor supplied onto the top surface-by

forming a series of furrows or other suitable troughs for leach liquor, and supplying the leach liquor into the furrows.

Claims 15-20 (Cancelled).

Claim 21 (Currently Amended): A method of leaching a metal value from a heap of a metal-containing ore, which method includes the steps of:

- (a) supplying a leach liquor onto a top surface of a section of a length of the heap and allowing the leach liquor containing metal values in solution to drain from a lower part of the section; with the leach liquor being supplied for a relatively short time period of less than 4 hours in each 24 hour period of carrying out the method as a downwardly flowing curtain that contacts the top surface of the heap as a line or a narrow band of less than 1 m wide that extends across the top surface at a flow rate that is sufficient so that the downwardly flowing leach liquor saturates the section of the heap while the leach liquor flows through the section of the heap; and
- (b) moving the curtain along the length of the section of the heap or the entire length of the heap continuously or in a series of steps.

Claim 22 (Currently Amended): A method of leaching a metal value from a heap of a metal-containing ore, which method includes the steps of:

- (a) supplying a leach liquor onto a top surface of a first section of a length of the heap and allowing the leach liquor containing metal values in solution to drain from a lower part of the section; with the leach liquor being supplied for a relatively short time period of less than 4 hours in each 24 hour period of carrying out the method at a flow rate that is sufficient so that the downwardly flowing leach liquor saturates the section of the heap while the leach liquor flows through the section of the heap; and
- (b) after supplying the leach liquor to the first section for the time period, repeating step (a) in a second section of the heap.

Claim 23 (New): A method of leaching a metal value from a heap of a metal-containing ore, which method includes the steps of:

(a) supplying a leach liquor as a downwardly flowing curtain of leach liquor onto a narrow band extending across a top surface of the heap, with the narrow band being less than 1 m wide, and leaching metal values from the ore in the narrow band and allowing the leach liquor containing metal values in solution to drain from a lower part of the section; and

(b) moving the curtain along a length of the heap continuously or in a series of steps,

wherein the leach liquor is supplied to each band of the heap for a relatively short time period of less than 4 hours in each 24 hour period during the total time period of carrying out the method at a flow rate that is sufficient so that the downwardly flowing leach liquor saturates each narrow band of the heap while the leach liquor flows through the narrow band of the heap.

Claim 24 (New): A method of leaching a metal value from a heap of a metal-containing ore, which method includes the steps of:

(a) supplying a leach liquor onto a top surface of a first section of a length of the heap for a predetermined time period and leaching metal values from the ore in the section and allowing the leach liquor containing metal values in solution to drain from a lower part of the section;

(b) after supplying the leach liquor to the first section for the time period, repeating step (a) in a second section of the heap; and

(c) successively repeating steps (a) and (b) in the first and second sections of the heap during a total time period of carrying out the method,

wherein the leach liquor is supplied for a relatively short time period of less than 4 hours in each 24 hour period during the total time period of carrying out the method at a flow rate that is sufficient so that the downwardly flowing leach liquor saturates the section of the heap while the leach liquor flows through the section of the heap.

Claim 25 (New): A method of leaching a metal value from a heap of a metal-containing ore, which method includes the steps of:

(a) supplying a leach liquor onto a top surface of a first section of a length of the heap for a predetermined time period via a series of spaced-apart spray outlets on a track-mounted header pipe that extends across the heap and leaching metal values from the ore in the section and allowing the leach liquor containing metal values in solution to drain from a lower part of the section;

(b) after supplying the leach liquor to the first section for the time period, moving the header pipe along a length of the heap to a second section of the heap and repeating step (a) in the second section of the heap; and

(c) successively repeating steps (a) and (b) in the first and second sections of the heap during a total time period of carrying out the method,

wherein the leach liquor is supplied for a relatively short time period of less than 4 hours in each 24 hour period during the total time period of carrying out the method at a flow rate that is sufficient so that the downwardly flowing leach liquor saturates the section of the heap while the leach liquor flows through the section of the heap.